



## EDUCATING THE IMPACT OF LIFE SATISFACTION AND MENTAL HEALTH AMONG EDIBLE AND MEDICINAL INDUSTRIAL EMPLOYEES

Dr. Andleeb Akhtar<sup>1</sup>, Prof. Dr. Sobia Masood<sup>2</sup>, Dr. Saddaf Ayub<sup>3\*</sup>, Ms Anbreen Bibi<sup>4</sup>, Dr Sameena Humayun Khan<sup>5</sup>, Zainab Shafqat<sup>6</sup>

<sup>1</sup>Lecturer, Department of Psychology, The University of Haripur, Haripur Pakistan  
Email:- andleebmalik81@yahoo.com

<sup>2</sup>Chairman, Department of Psychology, Rawalpindi Women University, Rawalpindi Pakistan  
Email:- Sobia.masood@f.rwu.edu.pk

<sup>3\*</sup>Associate Professor, Department of Education, The University of Haripur, Haripur Pakistan  
Email:- missraja@uoh.edu.pk

<sup>4</sup>Lecturer, Department of Economics, The University of Haripur, Haripur Pakistan  
Email:- anbreenzaid@gmail.com

<sup>5</sup>Lecturer, Department of Psychology, The University of Haripur, Haripur Pakistan

<sup>6</sup>BS student, Department of Psychology, The University of Haripur, Haripur Pakistan

**\*Corresponding Author:** Dr. Saddaf Ayub

\*Associate Professor, Department of Education, The University of Haripur, Haripur Pakistan  
Email:- missraja@uoh.edu.pk

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### ABSTRACT

The objective of the current research was to study the relationship between life satisfaction and mental health. Purposive sampling technique and cross sectional survey research was conducted with 155 participants (men, N= 148, women, N =7). Satisfaction with Life Scale (SWLS) and DASS-21 were the instruments used to assess life satisfaction and mental health respectively. Participants were the employees working in different organizations in Hattar, Haripur. Their aged ranged from 25 to 60 years. The key findings confirmed a strong negative relationship between life satisfaction and mental health ( $r = -.49$ , depression  $r = -.46$ , anxiety  $r = -.48$ , and stress  $r = -.49$  with  $p = .001$ ). Life satisfaction was identified as a significant negative predictor of mental health (adjusted  $R^2 = .49$ ,  $F(5, 294) = 26.40$ ,  $p < .001$ ) and their difference were significant in demographics variables such age, education level, management level etc.

**Key Words:** life satisfaction, mental health, industrial employees

Life satisfaction (SWL) and mental health are crucial factors that significantly affect employees' overall well-being and work performance. In the recent years, a growing interest and research in field of psychological well-being and life satisfaction has been seen (Fergusson et al, 2015; Qin & Yan, 2018). Satisfaction with life (SWL) is an individual's present level of satisfaction with their past and present life. Researchers have given the same definition of SWL but with additional definitions: life satisfaction is satisfaction based on one's established standards or experiences

(Sousa et al., 2015; Diener, 1985). However, SWL is subjective and people's interest decisions depend on their own judgment. Further research has examined various correlates and predictors of SWL in adults. It is considered an evaluation of reactions to life in general or to a specific area of life, such as family or friends. (Diener et al, 2009). SWL is the cognitive component of subjective well-being (Diener, et al., 2013; Diener et al, 2003). Several studies have explored the relationship between life satisfaction, mental health, and employee outcomes. Mainstream psychology mostly focused on the negative factors that affect mental health. With the emergence of positive psychology, the human strengths are being examined and researches on happiness and well-being has increased (Kardas et al., 2019).

Generally, financial status is most effective predictor of SWL (Chou & Chi, 1999). However, Oishi et al., (1999) in a study of 39 nations, found that financial satisfaction in poorer countries was strongly correlated with SWL than home life satisfaction as in richer nations. This suggests that actual income may or may not be a factor of SWL. Psychological factors, such as social comparison may affect SWL (Diener, et al, 1985). For example, self-esteem and relationship harmony (Kwan, et al, 1997), and emotional intelligence (Gannon & Ranzijn, 2005) can predict and affect SWL well. In particular, Pilcher (1998) found that depression, vigor, confusion, and negative affect were significant factors of SWL. Other researchers have shown that reducing anxiety and depression were important in managing SWL in aging adults (Beutel, et al., 2010). Kööts-Ausmees et al., (2013) also found that SWL was best predicted by positive and negative affect. Low or decreased SWL is correlated with psychological and social problems mostly, such as depression, anxiety, and poor social interaction. SWL moderated the outcomes of stressful life events on externalizing behavior problems, such as delinquent and aggressive behavior (Suldo & Huebner, 2004). SWL is a multifactorial construct, and is also a cognitive aspect of subjective well-being (Diener et al., 2002; Diener, 1995). Measures of well-being include both emotional and cognitive aspects (Huang et al., 2015) and are related to mental well-being and happiness (Seligman, 2000). Unlike emotional responses, which are often short-lived and variable (Gilman et al. 2000), satisfaction and overall evaluation of SWL are considered stable components of health (Eid and Diener 2004; Huebner, 2006). Increasing SWL can prevent the negative effects of stress and the development of psychological disorders. For example, adolescents with higher SWL are less prone to cultivate later, behaviors resulting due to stressful life events than adolescents with less SWL, suggesting that SWL acts as a moderator for externalizing behavior (Suldo & Huebner 2004). Past researcher examined mental health as a mediator of psychological flexibility on SWL (Lucas & Moore, 2019). Researchers examined the impact of psychological factors of small business workers upon SWL (Yang et al, 2020). Research examined that adolescent SWL was negatively associated with various health risk behaviors (Proctor et al., 2017). The negative component of mental health depressive mental state and negative emotions lessen the perception of satisfaction (Faragher et al, 2005). Positive component of mental health has a beneficial effect on satisfaction, while the negative component (i.e., anxiety) has an unfavorable effect on satisfaction (Lee et al., 2009). So, SWL is the individual achieving the set- goals (Koç, 2001) and evaluating whole life according their set criteria positively. (Diener et al, 1985)

Mental health is the psychological state of living an active life (Bixler, 2009) and is a pleasant experience. Mental health carries all aspects of one's life (Cox et al., 2005). Mental health is a crucial factor of employees' psychological well being (Warszewska, 2020). Anxiety, depression, sleep disturbances, and related symptoms are reported as prevalent in workplace and community (Liu, 2019). Poor mental health is often associated with depression, anxiety, and fear (Bogan & Fertig, 2013). Therefore, mental health includes both positive and negative components (Qin & Yan, 2018). The positive component of mental health refers to individuals being in a positive state and hopeful about life, while the negative component of mental health refers to individuals being in a depressed and anxious state and living negatively (Fairbrother & Warn, 2003; Faragher et al, 2005). Mental health is significantly related to productivity, commitment and job

satisfaction. Low mental health affects performance and interpersonal communication. Mental health is also associated with high psychological demands and low decision latitude. Unsatisfactory relationships at workplace and job insecurity act as risk factors (Kawachi, 2000; Dollard & Winefield 2002). Working conditions (Karasek et al, 1981; Cheng et al., 2001) and high job demand produced adverse health effects leading to depression, anxiety and physical illness (Karasek et al, 1990) in employees. Job dissatisfaction is often linked to increased stress levels and a higher risk of burnout (Maslach et al., 2018). Presence of poor mental health problems found to be associated with reduced SWL (Beutel et al., 2010; Flèche & Layard, 2013; Layard et al., 2013; Murphy et al., 2005). Lee et al (2009) investigated the prevalence of psychological problems and job satisfaction, and found the association between psychological distress and job satisfaction. Other investigations showed that the SWL level is the important factor in worker's health. Fleche and Layard (2013) examined the relationship between mental health and SWL. Layard et al., (2013) found that mental health was a major factor of SWL. In evaluating SWL, individuals evaluate their own set of criteria and standards against different aspects of their lives (Diener et al., 1985; Shin & Johnson, 1978). Stress is prevalent and an unavoidable part of workplace. Job stress is a affects employees' SWL and productivity (Akhtar et al 2022, Sharma et al, 2024). Stress affects mental health and life satisfaction. Past researchers confirmed negative relationships between anxiety and SWL (Serinet al., 2010). Low job satisfaction and poor SWL can be a cause of physician turnout (Shah et al., 2001; William et al., 2010). Depression and SWL showed a direct and negative relationship (Serinet al., 2010). Job stress is caused due to mismatch between the demands of the job and the worker's abilities, resources, or needs (Park & Jang, 2019). It reduces productivity, management demands, and cause sickness in various ways. Workplace stress impacts brain functions, memory, concentration in work, learning (Bamba, 2016) job performance reduced productivity, job dissatisfaction, and turnover intention. High workload and job demands, poor supervision and lack of support are workplace stressors leading to poor physical and mental health, anxiety, depression and low SWL (Ahakwa et al., 2021). Mental health is a pervasive aspect of overall well-being, with its prevalence and impact reaching across diverse demographics and cultures. Mental health aspects including anxiety, depression, and stress and other disorders affect a substantial portion of the global population, underscoring the need for a comprehensive understanding and effective strategies for support (Kessler et al, 2009).

Previous researchers have explored psychological factors that affect life satisfaction, and the impact of SWL on mental health and behavioral problems (Rees et al., 2013). Moreover, employees with low satisfaction are more prone to anxiety and depression (Wright & Cropanzano, 1998). Stress, anxiety and depression commonly occur (Holsboer, 2000). SWL is a construct affected by many variables. The intricate interplay between SWL and mental health has garnered substantial attention in contemporary research and organizational psychology. As mental health includes both positive and negative components (Qin & Yan, 2018), the life satisfaction being positive component is important to study. Assessment of relationship of negative affectivity between life satisfaction and the combined investigation of these three components (depression, anxiety and stress) is essential (Fergusson et al, 2015). Therefore, the aim of this study was to examine the SWL and mental health components including depression, anxiety and stress. This research aimed to study the intricate relationship between SWL and mental health among edible industrial employees and to study difference in demographics variables. Following hypotheses were formulated:

H1: Life satisfaction and mental health (depression, anxiety, and stress) will be negatively correlated.

H2: Life satisfaction will negatively predict mental health.

H3: There will be significant age difference in life satisfaction, depression, anxiety, stress and mental health among edible industrial employees.

H4: There will be significant educational difference in life satisfaction, depression, anxiety, stress and mental health among edible industrial employees.

H5: There will be significant management level difference in life satisfaction, depression, anxiety, stress and mental health among edible industrial employees.

**Method.** The research design of current study was cross sectional survey research. Life satisfaction is operationalized as scores on SWLS scale. The translated Urdu version (Butt et al, 2014) of Satisfaction with Life Scale (SWLS; Diener et al., 1985) was administered. The SWLS is a 5-item scale to measure SWL using a 7-point scale that ranges from 1 (strongly disagree) to 7 (strongly agree).Mental health is operationalized as scores on DASS-21 scale measuring depression, anxiety and stress. High scores on DASS-21 show low mental health. The DASS-21 short form Urdu version was used comprising of three subscales, each with seven items. Purposive sampling technique was used and sample consisted of male and females employees (N=155). Participant in this study were employees working in different organizations (Qarshi (medicinal industry), Sheazan, Tops, Hafeez gee, Lateef, EBM and Muree Sparklets) in Hattar Industrial State, Haripur, Pakistan. Their aged range 25-60 years and educational level was from intermediate to post graduate with management level from lower management to senior management employees. To collect data permission was taken from concerned authority and then willing employees participated in research. Questionnaires were given to them and their confidentiality was assured. They were instructed about the questionnaires and purposes of research and guided how to complete/fill the questionnaires. It took about 10minutes of each participates to fill questionnaires and collected back.

**Results.**

*Table 1: Demographic characteristics of study variable*

Demographic Characteristics	Groups	F	%
Gender	Male	148	95.5
	Female	7	4.5
Age	25-40	131	84.5
	41-60	24	4.5
Education	Intermediate	91	58.7
	Graduate	48	31.0
	Post Graduate	16	10.3
Organization	Qarshi	43	27.7
	Sheazan	25	16.1
	Tops	10	6.5
	Hafeez gee	37	23.9
	Lateef ghee	13	8.4
	EBM	20	12.9
	Murree Sparklets	7	4.5
Management Level	Lower management	40	25.8
	Middle management	73	47.1
	Senior management	42	27.1

Out of 155 respondents the sample is predominantly male (95.5%) with a small percentage of females (4.5%). Mostly respondents consisted of 25-45 age groups (84.5%) and has intermediate level of education (58.7%)from middle management (47.1%).Majority respondents were from Qarshi Industries Pvttd.

*Table 2: Descriptive Statistics, Alpha Coefficient & Correlation among Study Variables*

Variables	M	SD	$\alpha$	1	2	3	4	5
1.Life Satisfaction	25.20	5.64	.75	-				
2.Depression	5.18	5.27	.89	-.46**	-			
3.Anxiety	5.37	5.34	.90	-.48**	.90**	-		
4.Stress	5.50	5.29	.88	-.49**	.88**	.91**	-	
5.MH				-.49**	.95**	.97**	.96**	-

The descriptive statistics, Cronbach’s Alpha and Pearson’s correlation are shown below in the tabular form. The alpha reliability of scales was satisfactory. The correlation value of the study variables are ranged from  $-.49^{**}$  to  $-.97^{**}$  with  $p < .01$ . The correlation matrix indicated strong negative relationships between SWL and mental health;  $r = -.49$ , depression  $= -.46$ , anxiety  $r = -.48$ , and stress  $= -.49$  with  $p = .001$ . The negative correlations suggested that higher levels of life satisfaction are associated with lower levels of depression, anxiety, stress, and vice versa.

**Table 3: Regression Co-efficient of Life Satisfaction on Mental Health**

Model	B	SE	B	t	p	95%CL	
						LL	UL
(constant)	50.72	5.36		9.46	.00	40.11	62.32
Life Satisfaction	4.98	.24	4.98	6.6	.00	1.78	.96

Note. .  $R = .49$ ,  $R^2 = .24$ ,  $\Delta R^2 = .24$ ,  $F(5,294) = 26.40$ ,  $p < .001$

Linear regression analysis computed for life satisfaction as predictor variable and mental health as outcome variable. The results depicted that adjusted  $R^2$  value of .49 indicated that 49 % variance in mental health can be explain by life satisfaction with  $F(5, 294) = 26.40$  and  $p < .001$ . Therefore, findings confirmed that the life satisfaction was a significant negative predictor of mental health.

**Table 5: Mean, standard deviation and t test for Age differences among employees**

Variables	Young (25-40 years)		Elder (41-60 years)		t(299)	p	Cohen’s d
	M	SD	M	SD			
	Life Satisfaction	25.1	5.86	25.67			
Depression	6.09	5.34	1.17	1.92	.15	.00	3.76
Anxiety	6.35	5.36	.83	1.60	.13	.00	1.39
Stress	6.52	5.5	1.25	2.19	.15	.00	1.25
Mental health	18.96	15.60	3.25	5.5	.00	.00	1.34

For considering the age differences, t test performed. Table 5 shows that age differences in depression, anxiety, stress and mental health was significant among employees while age differences were non-significant only in life satisfaction. Depression, anxiety, stress and low mental health was significantly high in young employees. Cohen's d value suggested a large effect size, indicating a substantial difference in mental health scores between the two age groups.

**Table 6: Mean, standard deviation and t test for Employees education**

Variables	Intermediate (N=86)		Graduate (N=34)		Post Grad (N=14)		F (299)	ρ	n <sup>2</sup>
	M	SD	M	SD	M	SD			
	Life Satisfaction	24.0	5.97	27.65	4.42	25.20			
Depression	6.17	5.35	2.53	4.09	5.79	5.28	6.42	.00	.10
Anxiety	6.50	5.57	2.47	3.48	5.43	5.37	7.62	.00	.10
Stress	6.55	5.43	2.5	3.53	7.00	7.00	7.79	.00	.10
Mental health	19.22	15.81	7.53	10.72	18.21	16.77	7.75	.00	.07

Note.  $\rho = .00$

For assessing the education differences, ANOVA was performed. Table 6 shows that for each variable (life satisfaction, depression, anxiety, stress, and mental health), the F-test is statistically significant ( $p < 0.05$ ). The mean of life satisfaction of graduate employees was significantly higher than others. The mean of depression, anxiety and low mental health among intermediate employees (12- years of education) was significantly higher whereas stress was significantly higher in post-

graduated employees. The effect size ( $\eta^2$ ) is relatively small size effect and consistent across variables, ranging around .07 to .10.

**Table 7: Mean, standard deviation and t test for Employees education**

Variables	Lower. mgt		Middle.mgt		Senior.mgt		F (299)	$\rho$	$n^2$
	M	SD	M	SD	M	SD			
Life Satisfaction	24.74	5.76	26.53	4.09	22.89	6.13	6.28	.02	.08
Depression	5.97	5.20	3.11	4.76	8.00	5.19	12.27	.00	.15
Anxiety	6.83	5.53	2.84	3.82	8.22	5.49	16.71	.00	.20
Stress	7.03	5.11	3.03	4.71	8.46	5.18	15.96	.00	.19
Mental health	19.83	15.36	8.98	12.3	24.68	15.26	16.13	.00	.19

Table 6 shows that employee categories into lower, middle and senior management. The F-test is significant ( $p = 0.02$ ), indicating significant differences in life satisfaction, depression, anxiety, stress and mental health across management levels. The mean of life satisfaction of middle management employees was significantly higher than lower and senior management employees. The mean of depression, anxiety, stress and low mental health among senior management employees was significantly higher than lower and middle management. The effect size ( $\eta^2 = 0.08$ ) suggests a small effect.

**Discussion.**

This study examined the relationship of mental health (anxiety, depression, stress) and life satisfaction on employees and their difference in demographics variables such age, education level, management level etc. The hypotheses were supported by the data of current study. This study confirmed that there was a strong negative relationship between life satisfaction and mental health (Depression, Anxiety, and Stress). The negative correlations recommended that higher levels of life satisfaction were associated with lower levels of depression, anxiety, stress, and vice versa. Life satisfaction was significant negative predictors of the mental health (Fergusson et al, 2015; Khan et al, 2022; Qin & Yan, 2018; Wright & Cropanzano, 1998). Previously, K o ts-Ausmees et al., (2013) concluded that affect life satisfaction was best predicted by positive and negative affect. Low life satisfaction is often associated with psychological and social problems. When people are overwhelmed by unreachable, significant, extended and persistent demands or pressures, without a break, they are stressed and mental, physical or behavioral problems may result. Moreover, every organization experiences stress as workplaces and organizations have become increasingly complex. Workplace stress significantly affects employees' ability to perform jobs. U.K. organizations are working to address this issue (Jamal, 2011). t-test results confirmed a significant difference in depression, anxiety, stress and mental health between the young and older employees. Age had a curvilinear relationship with non somatic pain, depression, and anxiety. With age pain, depression, and anxiety decreases among adults of age 45 years and below, but it increased depression, and anxiety among people with age over 70 years (Akhtar et al, 2022; Chen et al, 2022). Non-significant differences were found in life satisfaction between the young and elder employees. Life satisfaction changes with age (Baird et al, 2010). For assessing the educational differences, ANOVAs results suggested significant differences in the mental health across different education levels. The life satisfaction of graduate employees was significantly higher than others. Depression, anxiety and low mental health was higher among intermediate educated (12- years of education) employees. Stress was significantly higher in post-graduated employees. Many variables including education, wealth, health have been found as determinants of SWL (Argyl, 2001). Furthermore, happiness and higher SWL were correlated with lower mortality rate among the healthy population (Chida et al., 2008). Similarly, assessing the management level differences, life satisfaction of middle management employees was significantly higher. Depression, anxiety, stress, and low mental health was higher in senior management employees significantly. Theories dive on factors that comprise job satisfaction. However, satisfaction is composed of both work satisfaction and environment satisfaction (Spector,

1997). Rapid technological advances and new working practices have changed the nature of many jobs. Employees are regularly being required to work well beyond their contract time, unwillingly, as organizations working hard to meet uptight deadlines and targets. Work practices have become more automated, inflexible and low job empowerment. Organizations have reduced their permanent workforce and converted to a culture of contracts and out-sourcing, leading to job insecurity among employees and developing workaholic culture throughout the world. This has reduced enjoyment and satisfaction among employees, they gain from their work. Moreover, The HERMES (Health and Employment Review: a Meta-Analysis Study) project reported job satisfaction had strongest link with employee life satisfaction.

The findings confirmed strong negative relationship between SWL and mental health (depression, anxiety and stress). Higher level of SWL was associated with lower levels of depression, anxiety, and stress. The limitations of this study included purposive sampling techniques and cross-sectional survey, as it was hard for employees to spare time of their busy job routines. Stratified random sampling, longitudinal research and Path analysis should be carried out as to understand the cause and effect and directionality of the relationship among variables. Future researchers should enhance the sample size. Other variables as mediators and moderators should also be studied so that the underlying process can further highlight hidden interacting variables.

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